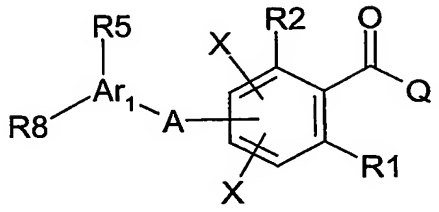
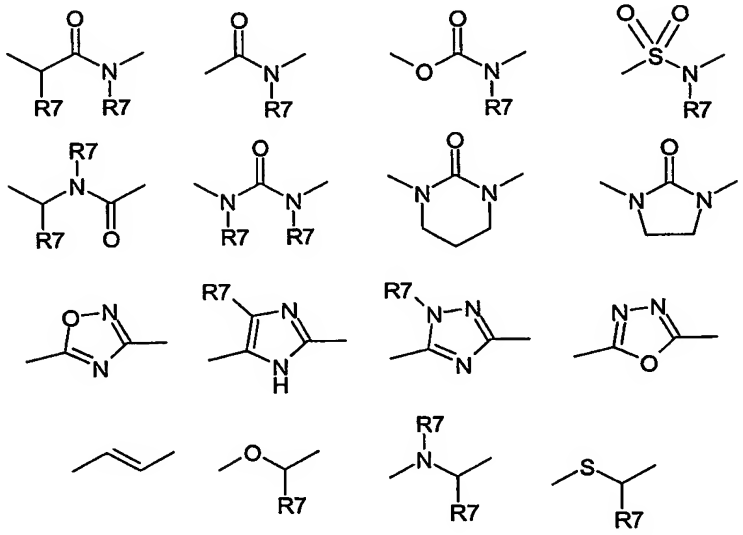
CLAIMS

1. A compound with the following structure (Formula I)



wherein -A- is a linker, which is selected from the group consisting of



and, wherein the linker -A- may be attached *via* either of the two free bonds to the Ar_1 group;

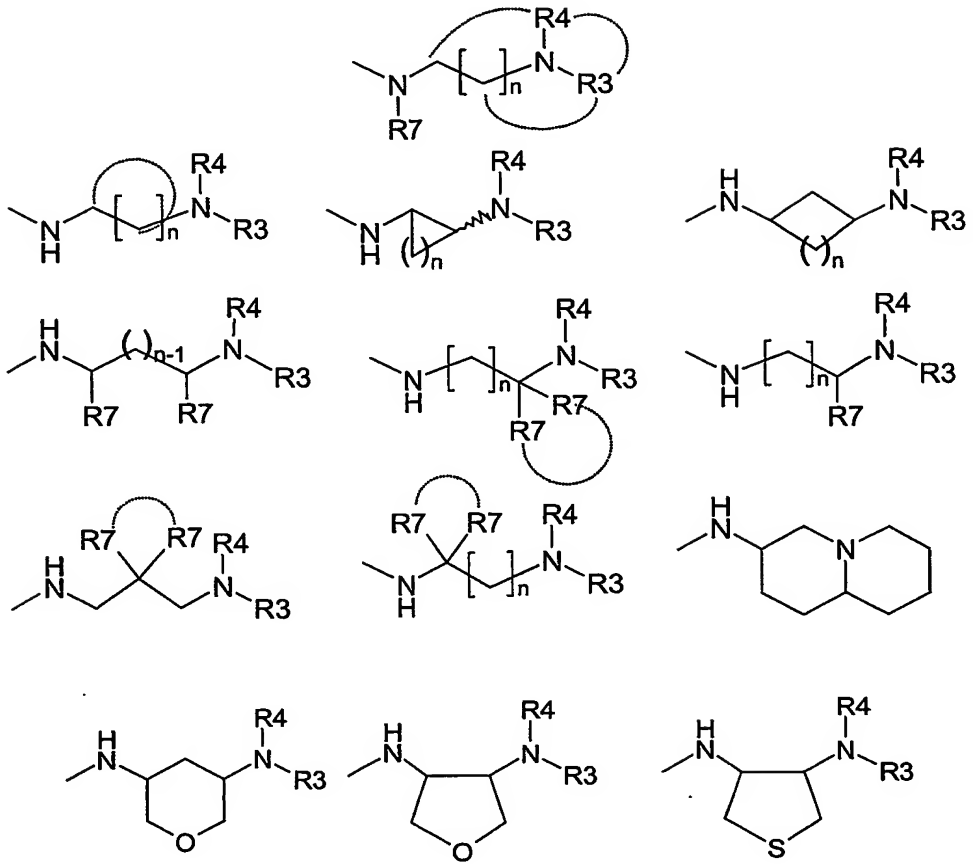
and R7 is the same or different and is hydrogen or a straight or branched C_1-C_4 alkyl or alkenyl group;

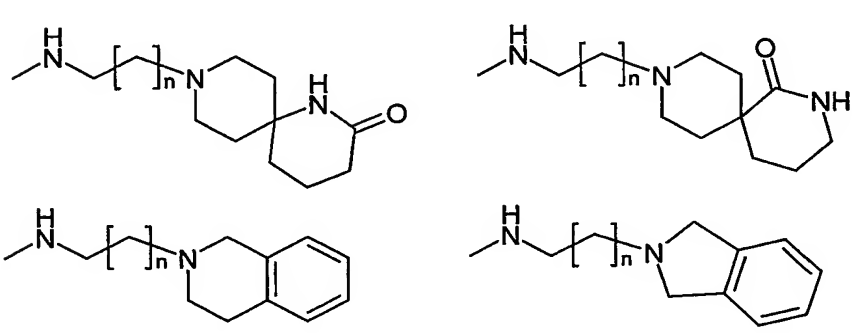
Ar_1 is an aryl or heteroaryl group such as, *e.g.* phenyl, pyridine, pyrimidine, pyrazine, thiophene, oxazole, isothiazole, pyrazole, pyrrole, imidazole, indole, benzimidazole, quinoline, isoquinoline, furan, benzofuran, benzothiophene, benzothiazole, indazole, thiazole, isoxazole, oxadiazole, indan;

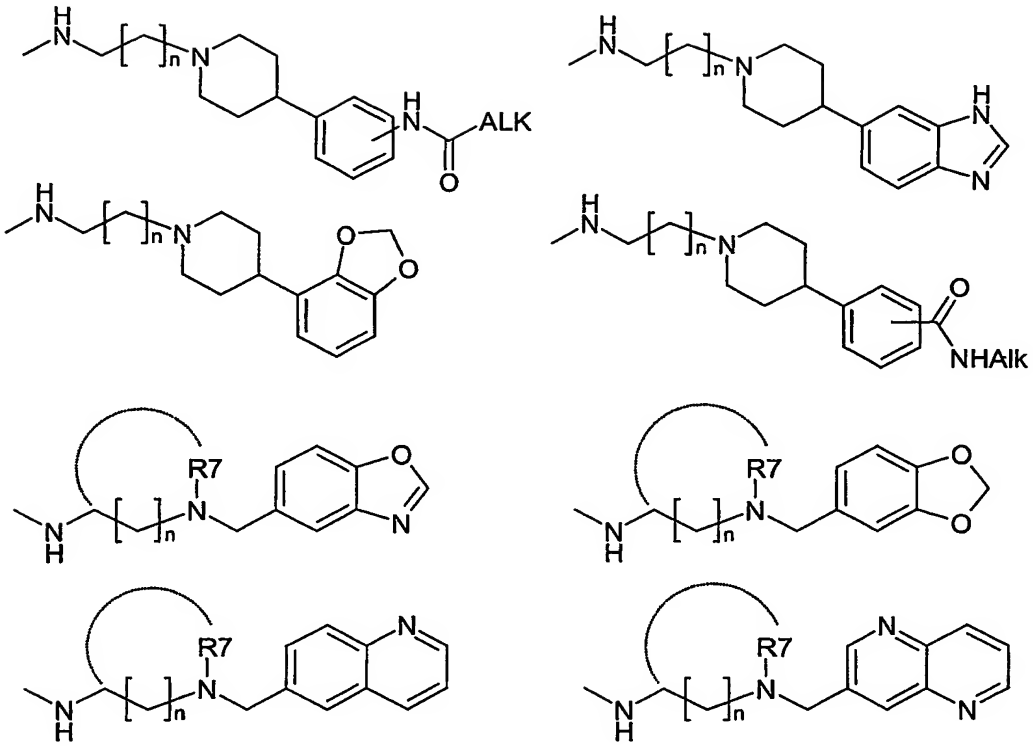
R1 is a lower alkoxy group alkyl-O- with one to four carbon atoms and preferably one carbon,

R2 is an R1 group or hydrogen, an OH or an NH_2 group,

Q is selected from the group consisting of







R3 and R4 are the same or different selected from straight or branched alkyl, alkenyl or alkynyl groups with 1-8 carbon atoms; cycloalkyl groups with 3-7 carbon atoms; alkylcycloalkyl with 4-9 carbon atoms; alkylaryl groups such as benzyl, 2-ethylphenyl, 3-propylphenyl, 4-butylphenyl; alkylheterocyclyl groups such as 2-ethylpiperazine, 3-propylpiperidine; alkylheteroaryl groups; the aryl, heterocyclyl and heteroaryl groups may be substituted with substituents such as Alk-CONH-, Alk-O-, HO-, NC-, AlkNH-, Alk_2N-, -$CONH_2$, -CONHAlk, -$CONAlk_2$, aryl, substituted aryl, benzyl, substituted benzyl groups

Alk is the same or a different alkyl, alkenyl or alkynyl group;

R3 and R4 may optionally be linked to each other, when possible, as indicated in Formula I; and oxygen or nitrogen atoms may be inserted in the chain or ring in a chemically stable position;

R5 is selected from hydrogen, halogen atoms, alkoxy groups (AlkO-), hydroxy, alkylamino groups (AlkNH-), dialkylamino groups (Alk_2N-), hydroxylalkyl groups, carboxamido groups (-$CONH_2$, -CONHAlk, -$CONAlk_2$), acylamido groups (-NHCO-Alk), acyl groups (-CO-Alk), -CHO, nitrile, alkyl, alkenyl or alkynyl groups, -SCH_3, partially or fully fluorinated alkyl,

alkoxy or thioalkoxy groups such as $-CH_2CF_3$, $-CF_2CF_3$, $-CF_3$, $-OCF_3$, $-SCF_3$; $-SO_2NH_2$, $-SO_2NHAlk$, $-SO_2NAlk_2$, $-SO_2Alk$;

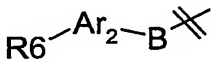
more than one R5 group, same or different, may be present on Ar_1; when more than one R5 or when one R5 and one R8 group are present they could be connected to each other, directly or with a suitable connecting moiety, to form rings;

X being the same or different H, F, Cl, Br, I, $-SCH_3$, $-CF_3$, $-OCF_3$, $-SCF_3$, OCH_3, or lower alkyl or alkenyl group;

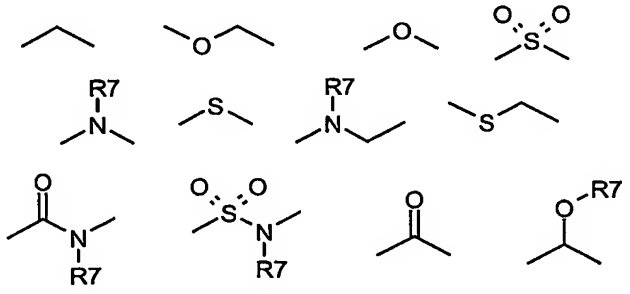
n is 1,2 or 3,

R8 is halogen atoms, alkyl, alkenyl or alkynyl groups, cycloalkyl groups with 3-7 carbons, aryl groups (Ar), heteroaryl groups, heterocyclyl groups, alkylcycloalkyl groups, alkylaryl groups, alkylheterocyclyl groups, alkylheteroaryl groups, arylalkoxy groups (*e.g.* $ArCH_2O$-), aryloxy groups (ArO-), alkoxy groups (AlkO-), dialkylamino groups (Alk_2N-), -CONHAlk, -CONHAr $-CONAlk_2$, -NHCO-Alk, -NHCO-Ar, -CO-Alk, -CO-Ar, $-SCH_3$, partially or fully fluorinated alkyl, alkoxy or thioalkoxy groups such as $-CH_2CF_3$, $-CF_2CF_3$, $-CF_3$, $-OCF_3$, $-SCF_3$;

or R8 has the structure



in which B is a single bond or a connecting moiety selected from the group consisting of:



which may be attached *via* either of the two free bonds to the Ar_1 group;

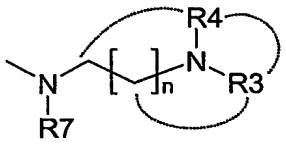
Ar_2 is an aryl or heteroaryl group such as e.g. phenyl, pyridine, pyrimidine, pyrazine, thiophene, oxazole, isothiazole, pyrazole, pyrrole, imidazole, indole, benzimidazole,

quinoline, isoquinoline, furan, benzofuran, benzothiophene, benzothiazole, indazole, thiazole, isoxazole, oxadiazole, indan;

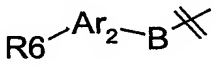
R6 is selected from hydrogen, halogen atoms, alkoxy groups (AlkO-), hydroxy, alkylamino groups (AlkNH-), dialkylamino groups (Alk_2N-), hydroxylalkyl groups, carboxamido groups (-$CONH_2$, -CONHAlk, -$CONAlk_2$), acylamido groups (-NHCO-Alk), acyl groups (-CO-Alk), -CHO, nitrile, alkyl, alkenyl or alkynyl groups, -SCH_3, partially or fully fluorinated alkyl, alkoxy or thioalkoxy groups such as -CH_2CF_3, -CF_2CF_3, -CF_3, -OCF_3, -SCF_3, -SO_2NH_2, -SO_2NHAlk, -SO_2NAlk_2, -SO_2Alk;

more than one R6 group, same or different, may be present on Ar_2; when more than one R6 group is present they could be connected to each other to form rings.

2. A compound according to claim 1, wherein Q is

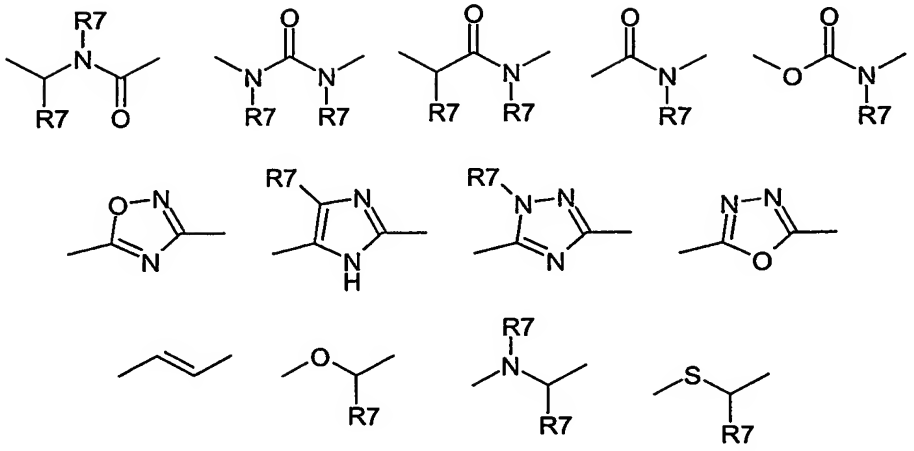


3. A compound according to claim 1 or 2, wherein R8 is



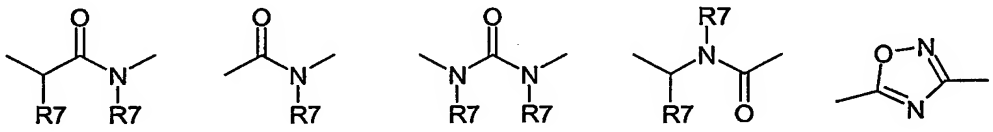
4. A compound according to claim 1 or 2, wherein R8 is selected from halogen atoms, alkyl, alkenyl or alkynyl groups, cycloalkyl groups with 3-7 carbons, aryl groups (Ar), heteroaryl groups, heterocyclyl groups, alkylcycloalkyl groups, alkylaryl groups, alkylheterocyclyl groups, alkylheteroaryl groups, arylalkoxy groups (*e.g.* $ArCH_2O$-), aryloxy groups (ArO-), alkoxy groups (AlkO-), dialkylamino groups (Alk_2N-), -CONHAlk, -CONHAr -$CONAlk_2$, -NHCO-Alk, -NHCO-Ar, -CO-Alk, -CO-Ar, -CF_3, -OCF_3, -SCF_3, SCH_3.

5. A compound according to any of the preceding claims wherein A is selected from the group consisting of:



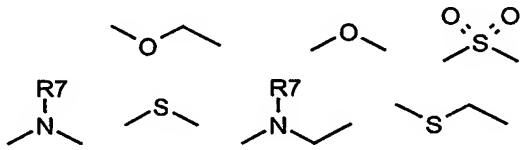
wherein R7 is as defined in claim 1.

6. A compound according to any of the preceding claims wherein A is selected from the group consisting of:



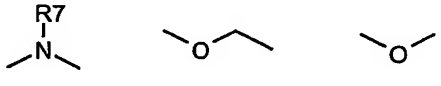
wherein R7 is as defined in claim 1.

7. A compound according to any claims 1-3, 5, 6, wherein B is a single bond or selected from the group consisting of:



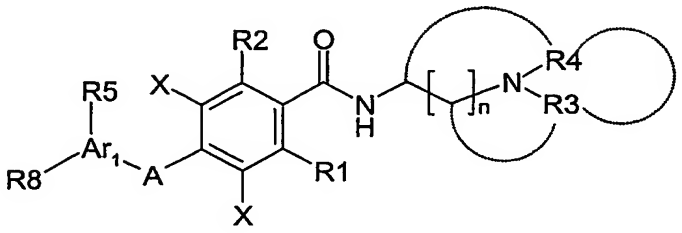
wherein R7 is as defined in claim 1.

8. A compound according to claim 7, wherein B is selected from the group consisting of:



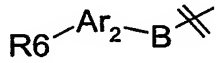
wherein R7 is as defined in claim 1.

9. A compound according to any of the preceding claims with the following structure



wherein Ar_1, Ar_2, A, B, R1, R2, R3, R4, R5, R6, R7, R8, X and n are defined as in claim 1.

10. A compound according to claim 9, wherein R8 is



11. A compound according to any of the preceding claims wherein the -B- moiety is not placed ortho to the -A- linker.

12. A compound according to any of the preceding claims, wherein Ar_1 and Ar_2 are the same or different aryl or heteroaryl groups such as, e.g., phenyl, pyridine, thiophene.

13. A compound according to any of the preceding claims, wherein R2 is hydrogen.

14. A compound according to any of the preceding claims, wherein R2 is hydrogen and X is H, F, Cl, Br, I, CF_3, OCF_3, SCF_3, SCH_3 or lower alkyl or alkenyl group.

15. A compound according to any of the preceding claims, wherein R2 is H and X is H or F.

16. A compound according to any of the preceding claims, wherein R5 and R6 may be the same or different selected from hydrogen, halogen atoms, alkoxy groups (AlkO-), alkyamino groups (AlkNH-), dialkylamino groups (Alk_2N-), carboxamido groups (-$CONH_2$, -CONHAlk, $CONAlk_2$), acylamido groups (-NHCO-Alk), nitrile, lower alkyl groups, -CF_3, -OCF_3, -SCF_3, -SCH_3.

17. A compound according to any of the preceding claims in amorphous or crystalline form.

18. A compound according to any of the preceding claims in racemic or enantiomeric form.

19. A compound according to any of the preceding claims in the form of a physiologically acceptable salt, complex, solvate or prodrug thereof.

20. A compound according to any of the preceding claims for use in medicine.

21. A compound according to any of the preceding claims, which is an agent for preventing or treating diseases caused by or involving a melanin-concentrating hormone.

22. A compound according to any of the preceding claims, which modulates the activity of an MCH receptor.

23. A compound according to any of the preceding claims, which has antagonistic activity against an MCH receptor.

24. A compound according to any of claims 1-22, which has agonistic, inverse agonistic or allosteric activity against an MCH receptor.

25. A compound according to any of the preceding claims, wherein the MCH receptor has at least about 80% such as, e.g. at least about 85% or at least about 90% homology to the amino acid sequence CTLITAMDAN or CTIITSLDTC

26. A compound according to any of the preceding claims, wherein the MCH receptor comprises the amino acid sequence CTLITAMDAN or CTIITSLDTC.

27. A compound according to any of the preceding claims, wherein the MCH receptor is an MCH1 or MCH2 receptor.

28. A compound according to any of the preceding claims, wherein the MCH receptor is an MCH1 receptor.

29. A compound according to any of the preceding claims, wherein the MCH receptor is a mammalian such as human receptor.

30. A compound according to any of the preceding claims, which is an agent for preventing or treating feeding disorders.

31. A compound according to any of claims 1-23 or 25-30, which is an agent for reducing body mass.

32. A compound according to any of claims 1-23 or 25-31, which is an agent for preventing or treating Syndrome X (metabolic syndrome), or any combination of obesity, insulin resistance, dyslipidemia, impaired glucose tolerance and hypertension.

33. A compound according to any of claims 1-23 or 25-31, which is an agent for preventing or treating Type II diabetes or Non Insulin Dependent Diabetes Mellitus (NIDDM).

34. A compound according to any of claims 1-23 or 25-33, which is an agent for preventing or treating bulimia, obesity and/or bulimina nervosa.

35. A compound according to any of claims 1-29, which is an antidepressant and/or anti-anxiety agent.

36. A cosmetic method for reducing overweight and/or for treating of and/or preventing overweight, bulimia, bulimia nervosa, obesity and/or complications thereto, the method comprising administering to an animal such as, e.g. a human in need thereof, an effective amount of a compound according to any of claims 1-23 or 25-34.

37. A method for the treatment and/or prophylaxis of diseases caused by a melanin-concentrating hormone, the method comprising administering to a mammal in need thereof an efficient amount of a compound according to any of claims 1-35.

38. A method for the treatment and/or prophylaxis of diseases caused by feeding disorders, the method comprising administering to a mammal in need thereof an efficient amount of a compound according to any of claims 1-34.

39. A method for modifying the feeding behaviour of a mammal, the method comprising administering to a mammal in need thereof an efficient amount of a compound according to any of claims 1-34.

40. A method for the reduction of body mass, the method comprising administering to a mammal in need thereof an efficient amount of a compound according to any of claims 1-23 or 25-34.

41. A method for the treatment and/or prophylaxis of Syndrome X (metabolic syndrome) or any combination of obesity, insulin resistance, dyslipidemia, impaired glucose tolerance and hypertension, the method comprising administering to a mammal in need thereof an efficient amount of a compound according to any of claims 1-23 or 25-34.

42. A method for the treatment and/or prophylaxis of Type II diabetes or Non Insulin Dependent Diabetes Mellitus (NIDDM), the method comprising administering to a mammal in need thereof an efficient amount of a compound according to any of claims 1-23 or 25-34.

43. A method for the treatment and/or prophylaxis of bulimia, bulimia nervosa and/or obesity, the method comprising administering to a mammal in need thereof an efficient amount of a compound according to any of claims 1-23 or 25-34.

44. A method for the treatment and/or prophylaxis of depression and/or anxiety, the method comprising administering to a mammal in need thereof an efficient amount of a compound according to any of claims 1-24 or 35.

45. A pharmaceutical composition comprising a compound according to any of the claims 1-35 or a physiologically acceptable salt thereof together with one or more physiologically acceptable excipients.

46. A pharmaceutical composition according to claim 45, wherein the compound is present in the form of a physiologically acceptable salt such as a salt formed between the compound and an inorganic acid such as e.g., a hydrochloride, a hydrobromide, a hydroiodide, a nitrate, a nitrite, a H_3PO_3 salt, a H_3PO_4 salt, a H_2SO_3 salt, a sulfate, a H_2SO_5 salt, or a salt formed between the compound and an organic acid such as organic acids like e.g. H_2CO_3, acetic acid, C_2H_5COOH, C_3H_7COOH, C_4H_9COOH, $(COOH)_2$, $CH_2(COOH)_2$, $C_2H_5(COOH)_2$, $C_3H_6(COOH)_2$, C4H8(COOH)2, $C_5H_{10}(COOH)_2$, fumaric acid,

maleic acid, lactic acid, citric acid, tartaric acid, ascorbic acid, benzoic acid, salicylic acid and phthalic acid.

47. A pharmaceutical composition according to claim 45 or 46 for enteral and/or parenteral use.

48. A pharmaceutical composition according to claim 45 or 46 for oral, buccal, rectal, nasal, topical, vaginal or ocular use.

49. A pharmaceutical composition according to any of claims 45-48 in the form of a solid, semi-solid or fluid composition.

50. A pharmaceutical composition according to claim 49 in solid form, wherein the composition is in the form of tablets such as, e.g. conventional tablets, effervescent tablets, coated tablets, melt tablets or sublingual tablets, pellets, powders, granules, or particulate material.

51. A pharmaceutical composition according to claim 49 in semi-solid form, wherein the composition is in the form of a chewing gum, an ointment, a cream, a liniment, a paste, a gel or a hydrogel.

52. A pharmaceutical composition according to claim 49 in fluid form, wherein the composition is in the form of a solution, an emulsion, a suspension, a dispersion, a liposomal composition, a spray, a mixture, or a syrup.

53. A pharmaceutical composition according to any of claims 46-52 comprising a therapeutically effective amount of a compound according to claims.

54. A pharmaceutical composition according to claim 53, wherein the amount is from about 0.001 mg to about 1 g such as, e.g. from about 0.005 to about 750 mg, from about 0.01 to about 500 mg, from about 0.05 to about 500 mg, from about 0.1 to about 250 mg, from about 0.1 to about 100 mg or from about 0.5 to about 50 mg.

55. Use of a compound according to any of claims 1-23 or 25-34 or a pharmaceutically acceptable salt thereof for the manufacture of a cosmetic composition for reducing overweight and/or for treating of and/or preventing overweight, bulimia, bulimia nervosa, obesity and/or complications thereto.

56. Use of a compound according to any of claims 1-35 or a pharmaceutically acceptable salt thereof for the manufacture of a pharmaceutical composition for i) the treatment and/or prophylaxis of diseases caused by a melanin-concentrating hormone, ii) the treatment and/or prophylaxis of diseases caused by feeding disorders, iii) modifying the feeding behaviour of a mammal, iv) the reduction of body mass, v) the treatment and/or prophylaxis of bulimia, bulimia nervosa and/or obesity, or vi) the treatment and/or prophylaxis of depression and/or anxiety.